



State of Utah

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DIVISION OF WATER QUALITY

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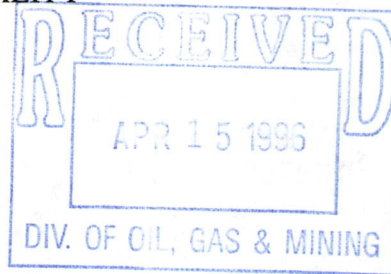
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April 10, 1996

Mr. Douglas M. Koza  
Deputy State Director, Natural Resources  
Bureau of Land Management  
Utah State Office  
324 South State, Suite 301  
Salt Lake City, Utah 84111-2303

Dear Mr. Koza:

Subject: White River Oil Shale Mine Closure Plan

We have reviewed your letter pertaining to using fly-ash to back fill the White River Oil Shale mine. We received this letter on April 1, 1996.

At present the Bureau of Land Management is evaluating nine alternative methods to seal the mine, and we have been asked to comment on two of the alternative methods listed below:

1. Back fill the mine with slurry of water and fly-ash.
2. Back fill the mine with a slurry containing a mixture of 95% fly-ash and 5% cement, to act as a structural plug at the bottom of the shafts.

The mine produces methane gas, and as a result, the alternatives listed above are designed to seal the mine to reduce the potential for an explosion.

Your letter asks if either fly-ash or fly-ash & cement mixture would pose an environmental risk to the Birds Nest aquifer. The source of fly-ash would be from the Bonanza power plant.

We have know information on fly-ash from the Bonanza power plant. We therefore, recommend that a leach test be performed on representative samples and samples mixed with 5% cement taken from the power plant to access risk. We would be happy to assist you in evaluating the results of the tests done on the samples.



Mr. Douglas M. Koza  
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We recognize that the Division of Oil Gas and Mining has the authority for regulating mine closure, however we complement you in sicking or involvement.

Should you need further assistance please contact me or Lyle Stott of my staff.

Sincerely,



Kiran L. Bhayani, P.E., D.EE.  
Manager, Design Evaluation Section

JBP:LWS:lws:erb

cc: Dianne Nielsen, Ph.D., Executive Director - Department of Environmental Quality  
Mr. Lowell Card - Uintah Basin Public Health Department  
Mr. Ted Allen - Uintah Basin Public Health Department  
Mr. Wayne Hedberg - Division of Oil, Gas and Mining

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FILE:WHITE RIVER SHALE